

FACILITIES INVENTORY

Existing and future (2000 and 2020) wastewater treatment/reclamation facilities and associated infrastructure within the study area were inventoried. The purpose of the inventory includes:

- Identify existing treatment and infrastructure
- Identify reclaimed water transmission infrastructure
- Determine current wastewater flows
- Determine existing reuse and disposal mechanisms and how much reclaimed water/effluent is distributed to each

The basis for the inventory came from local governments, utilities, and the Water Supply Plan.

Flows were generated from Monthly Operating Reports (MORs) submitted for each facility to FDEP in accordance with their permits and from monitoring data provided by the facilities. Flow data mainly came from 2000-2001 data and is denoted in Attachment A.

Wastewater Treatment/Reclamation Facilities

There are 21 wastewater treatment plants/reclamation facilities of significance in the study area. Significant facilities are defined as those with average influent flows of at least 100,000 gallons per day. The facility locations are shown in Figures 2 and 3 for Lee and Collier counties, respectively. Table 1 summarizes the facility information.

The reclaimed water/effluent from the wastewater treatment/reclamation facilities is reused for urban irrigation, commercial uses, and groundwater recharge via percolation ponds, or disposed of via injection wells or discharged to surface water. Table 2 presents the reuse and disposal information from the facilities for the same period of flow listed in Attachment A. Also, Table 3 displays the existing reclaimed water users for the study area.

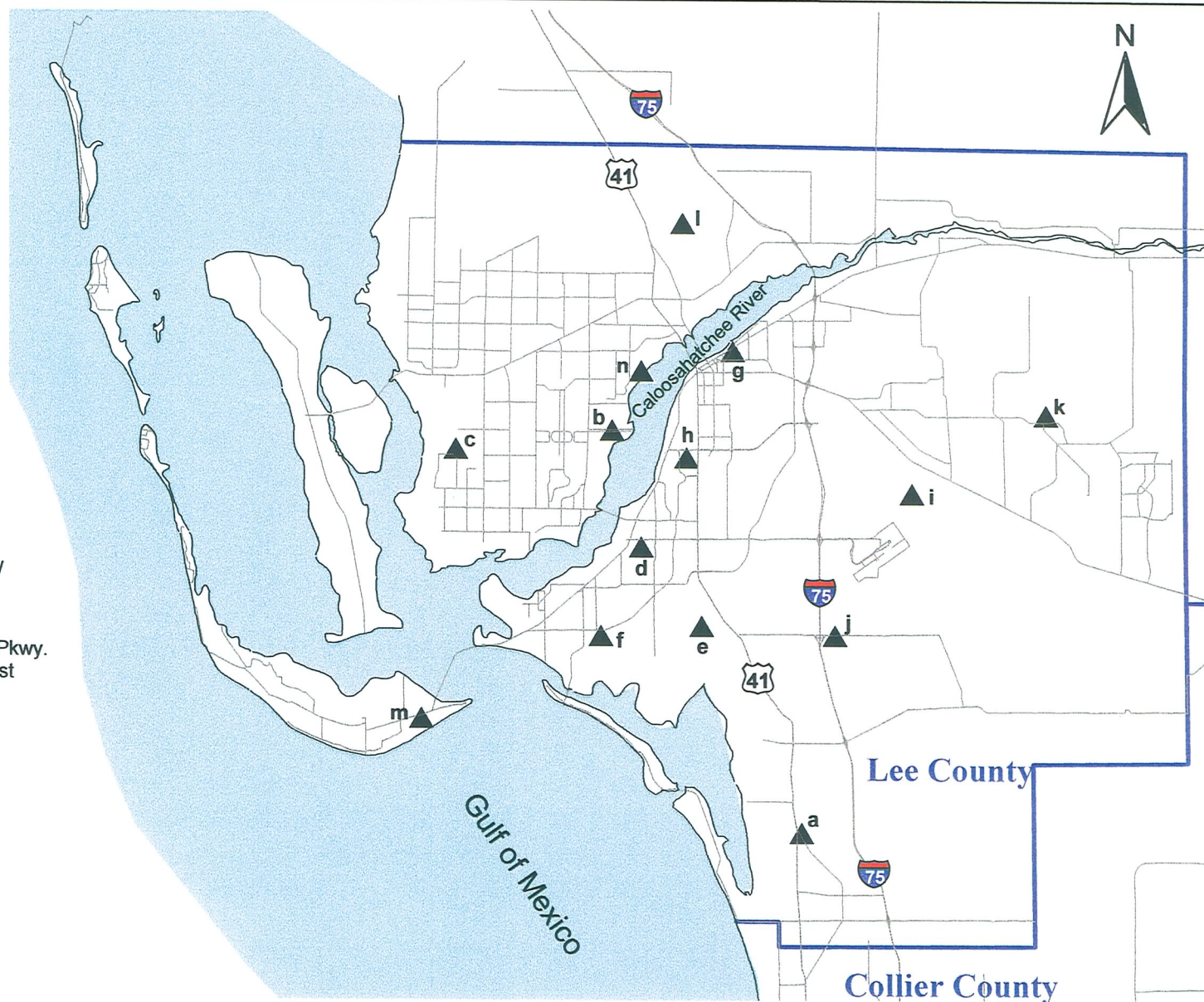
A list of potential end users for the RIDS has been determined based on information received from the local governments and review of information from the Lee County and Collier County planning departments. This will include existing and planned new golf courses, large green space areas, and future large planned residential developments. Table 4 presents the list of potential users.

Reclaimed Water Transmission Facilities

Existing reclaimed water transmission facilities were identified. The focus was primarily on larger pipelines; therefore, distribution systems and smaller lines may not be shown on the maps. Figures 4 and 5 present the existing reclaimed water transmission facilities for Lee and Collier counties, respectively.

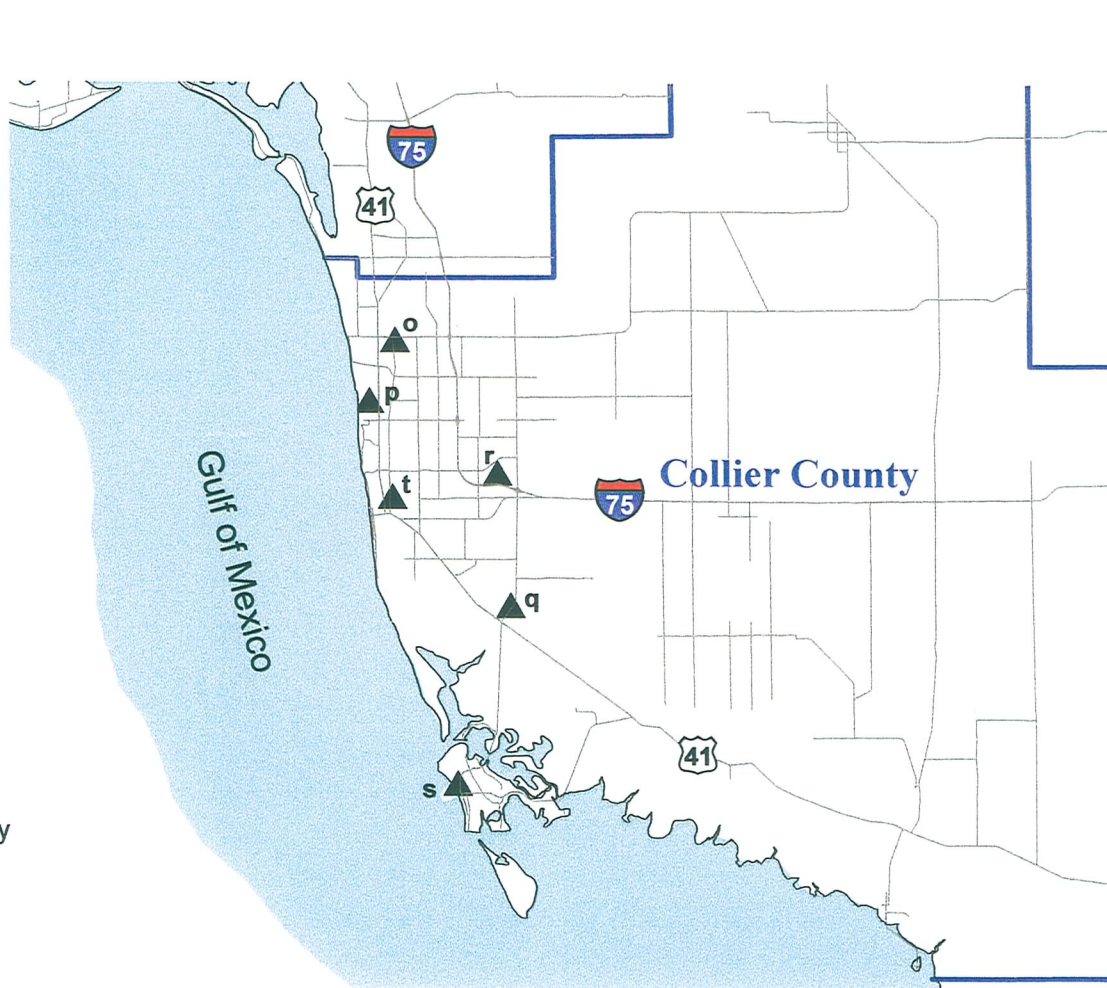
LEGEND:

-  Coast Line
-  Major Roads
-  County Boundary
-  Water
-  Wastewater Treatment/Reclamation Facilities
- a. Bonita Springs
- b. Cape Coral Everest Pkwy.
- c. Cape Coral Southwest
- d. Fiesta Village
- e. Forest Utility
- f. Fort Myers Beach
- g. Fort Myers Central
- h. Fort Myers South
- i. Gateway
- j. Gulf Three Oaks
- k. Lehigh Acres
- l. North Fort Myers
- m. Sanibel
- n. Waterway Estates



LEGEND:

-  Coast Line
-  Major Roads
-  County Boundary
-  Water
-  Wastewater Treatment/Reclamation Facilities
 - o. Collier County North
 - p. Collier County Pelican Bay
 - q. Collier County South
 - r. Golden Gate
 - s. Marco Island Utilities
 - t. Naples



10 0 10 20 Miles

Table 1
Wastewater Treatment/Reclamation 2000/2001 Facility Summary

Facility Name	Stakeholder	Service Area Acreage	Permitted Capacity (MGD)	Annual Average Daily Flow (MGD)	Maximum Monthly Flow (MGD)	Minimum Monthly Flow (MGD)
Collier County						
Collier County North/Pelican Bay	Collier County Utilities	54,374	9.5	8.6	10.4	6.9
Collier County South	Collier County Utilities	78,290	8.0	6.4	7.5	5.4
Golden Gate	Gulf Environmental Services/Florida Governmental Utility Authority	2,750	1.0	0.9	1.5	0.8
Marco Island	Florida Water Services	7,368	3.5	2.7	3.4	1.9
Naples	City of Naples Utilities	12,055	10.0	6.7	7.8	5.6
<i>Subtotal</i>		<i>154,837</i>	<i>32.0</i>	<i>25.3</i>	<i>30.6</i>	<i>20.6</i>
Lee County						
Bonita Springs	Bonita Springs Utilities	36,568	4.3	2.7	3.1	2.1
Everest/Southwest WRF's	Cape Coral Utilities	42,670	15.1	9.5	11.6	8.5
Fiesta Village	Lee County Utilities	9,781	5.0	2.2	2.8	1.8
Forest Utilities	Forest Utilities	1,794	0.5	0.2	0.3	0.2
Ft. Myers Beach	Lee County Utilities	12,954	6.0	3.0	3.8	2.3
Ft. Myers Central	Fort Myers Utilities	13,212	11.0	6.3	12.3	4.4
Ft. Myers South	Fort Myers Utilities	19,069	12.0	6.7	11.5	4.9
Gateway	Gateway Utilities	6,905	0.5	0.3	0.3	0.3
Three Oaks and San Carlos	Gulf Environmental Services	22,363	1.0	1.3	1.6	1.1
Lehigh Acres	Florida Water Services	62,672	2.1	1.2	2.4	0.6
North Ft. Myers	North Fort Myers Utilities	20,653	2.0	1.6	2.6	1.2
Pine Island	Lee County Utilities	795	0.5	0.1	0.2	0.0
Sanibel	Island Water Association	9,779	1.6	0.9	1.0	0.7
Waterway Estates	Lee County Utilities	3,716	1.3	0.9	1.2	0.7
<i>Subtotal</i>		<i>262,931</i>	<i>62.8</i>	<i>37.0</i>	<i>54.8</i>	<i>28.9</i>
Total		417,768	94.7	62.3	85.4	49.5

**Table 2
Reuse and Disposal 2000/2001 Summary**

Facility Name	Disposal Method	Annual Average Daily Flow (MGD)	Maximum Monthly Flow (MGD)	Minimum Monthly Flow (MGD)
Collier Co.				
Collier Co. North/Pelican Bay	Reuse	6.7	8.5	5.3
	Percolation Ponds	0.3	1.6	-
	Deep Well Injection	0.3	1.7	-
Collier Co. South	Reuse	3.5	5.6	1.3
	Surface Water	2.3	5.9	0.6
	Deep Well Injection	0.4	2.2	0.0
Golden Gate	Reuse	0.9	1.5	0.8
	Surface Water	-	-	-
	Deep Well Injection	-	-	-
Marco Island Utilities	Reuse	1.2	1.8	0.3
	Percolation Ponds	-	-	-
	Deep Well Injection	0.8	1.8	0.0
Naples	Reuse	6.1	6.2	6.0
	Surface Water	1.0	1.2	0.8
	Deep Well Injection	-	-	-
Subtotal - Collier	Reuse	18.4	23.6	13.7
	Surface Water/Perc. Ponds	2.59	8.6	1.3
	Deep Well Injection	0.7	5.7	0.0
Lee Co.				
Bonita Springs	Reuse	2.6	3.1	1.5
	Wet Weather	0.1	0.5	-
	Deep Well Injection	-	-	-
Cape Coral Utilities	Reuse	21.7	32.5	8.5
	Surface Water	1.3	5.4	-
	Deep Well Injection	-	-	-
Fiesta Village	Reuse	0.9	1.3	0.2
	Surface Water	1.4	2.7	0.7
	Deep Well Injection	-	-	-

Table 2
Reuse and Disposal 2000/2001 Summary

Facility Name	Disposal Method	Annual Average Daily Flow (MGD)	Maximum Monthly Flow (MGD)	Minimum Monthly Flow (MGD)
Forest Utility	Reuse	0.2	0.3	0.2
	Surface Water	-	-	-
	Deep Well Injection	-	-	-
Ft. Myers Beach	Reuse	2.4	3.6	1.2
	Percolation Ponds	0.5	0.5	0.5
	Deep Well Injection	0.3	1.2	-
Ft. Myers Central	Reuse	0.7	0.8	4.4
	Surface Water	5.7	11.7	-
	Deep Well Injection	-	-	-
Ft. Myers South	Reuse	-	-	-
	Surface Water	7.4	12.3	5.8
	Deep Well Injection	-	-	-
Gateway	Reuse	0.3	0.3	0.3
	Surface Water	-	-	-
	Deep Well Injection	-	-	-
Gulf Environmental Services	Reuse	0.8	0.8	0.7
	Surface Water	-	-	-
	Deep Well Injection	-	-	-
Lehigh Acres	Reuse	1.2	2.4	0.6
	Surface Water	-	-	-
	Deep Well Injection	-	-	-
North Ft. Myers	Reuse	0.7	1.1	0.3
	Surface Water	-	-	-
	Deep Well Injection	0.9	1.7	0.3
Pine Island	Reuse	0.1	0.2	0.0
	Surface Water	-	-	-
	Deep Well Injection	-	-	-
Sanibel	Reuse	0.8	1.0	0.7
	Surface Water	0.1	0.2	0.0
	Deep Well Injection	-	-	-
Waterway Estates	Reuse	0.0	0.1	-
	Surface Water	0.8	1.2	0.6
	Deep Well Injection	-	-	-
Subtotal -Lee	Reuse	32.47	47.6	18.5

Table 2 Reuse and Disposal 2000/2001 Summary				
Facility Name	Disposal Method	Annual Average Daily Flow (MGD)	Maximum Monthly Flow (MGD)	Minimum Monthly Flow (MGD)
	Surface Water/Wet Weather	17.2	34.4	7.5
	Deep Well Injection	1.2	2.9	0.3
Total Disposal - Lee and Collier				
	Reuse	50.9	71.2	32.2
	Surface Water	19.8	43.0	8.8
	Deep Well Injection	1.9	8.6	0.3

**Table 3
Existing Reclaimed Water Users**

	Existing User	Reuse Demand (MGD)
Collier County		
Collier Co. North/Pelican Bay		
	Audubon	0.80
	Autumn Woods	0.20
	Calusa Bay	0.10
	Beachwalk Residents Assoc.	0.11
	Collier's Reserve	0.40
	Imperial	0.70
	Palm River	0.70
	Pelican Bay	4.09
	Pelican Marsh	2.60
	St. Croix	0.10
	Tract 21	0.80
	Vineyards Utility	3.00
	Small Users*	0.12
	Subtotal	13.72
Collier Co. South		
	Countryside/PCP Venture	0.55
	Foxfire Community Assoc. of Collier Co., Inc.	0.97
	Glades Country Club Apts.	1.90
	Hibiscus Golf Club	0.50
	Lakewood Community Services Assoc., Inc.	1.00
	Lakewood Country Club of Naples, Inc.	0.41
	Lely Development District & GC	2.20
	Riviera Golf Club of Naples, Ltd.	0.66
	Royal Palm Country Club	1.00
	Windstar	0.42
	Subtotal	9.61
Golden Gate	Primarily Residential	
Marco Island Utilities	Primarily Residential	
Naples		
	Hole-in-the-Wall Golf Course	0.59
	Moorings Country Club of Naples	0.18
	Wilderness Country Club	0.66
	High Point Country Club	0.12
	Royal Ponciana Golf Club	1.47
	Country Club of Naples	0.50
	Bears Paw Country Club	0.56

Table 3
Existing Reclaimed Water Users

	Existing User	Reuse Demand (MGD)
	Beach Club Golf Course	0.51
	Quail Run Country Club	0.24
	Subtotal	4.81
Collier County Subtotal =		23.33
Lee County		
Bonita Springs		
	Brooks of Bonita Springs	2.24
	Fountain Lakes	0.52
	Gulf Atlantic	0.96
	Pelican Landing	2.41
	Bonita Bay	2.69
	Cedar Creek	0.73
	Small Users*	0.26
	Subtotal	9.81
Cape Coral Everest Pkwy.	Primarily Residential	
Cape Coral Southwest	Primarily Residential	
Fiesta Village	(See Ft. Myers Beach)	
Forest Utility	Primarily Residential	
Ft. Myers Beach		
	Bayside Estates	0.12
	Health Park	0.21
	Summerlin Ridge	0.10
	Myerlee CC	0.14
	Cypress Lake CC	0.20
	McGregor Park Condos	0.09
	Kelly Greens	0.32
	Lexington	0.57
	Gulf Harbour	0.56
	The Landings	0.35
	The Woodlands	0.50
	Crown Colony	0.50
	County Percolation Ponds	0.24
	Small Users*	0.09
	Subtotal	3.99
Ft. Myers Central		
	Heritage Palms Golf Course	0.47
	Heritage Palms	0.77
	Eastwood Golf Course	0.56

**Table 3
Existing Reclaimed Water Users**

	Existing User	Reuse Demand (MGD)
	Ft. Myers Country Club	0.37
	Omni Development	0.42
	Minor Irrigation Users	0.43
	Jack Parker Corp.	0.35
	Jack Parker Corp. Golf Course	0.47
	Sun City Golf Courses	0.70
	Sun City	1.05
	Colonial Golf & Country Club Golf Course	0.29
	Colonial Golf & Country Club Residential	0.57
	Gateway Development	0.84
	Small Users*	0.12
	Subtotal	7.41
Ft. Myers South	(See Ft. Myers Central)	
Gateway	Primarily Residential	
Gulf Environmental Services	Primarily Residential	
High Point	Primarily Residential	
Lehigh Acres	Primarily Residential	
North Ft. Myers	Primarily Residential	
Pine Island	Primarily Residential	
Sanibel		
	West Gulf Dr. Condominiums	0.23
	Middle Gulf Dr. Condominiums	0.25
	Small Users*	0.03
	Subtotal	0.51
Waterway Estates		
	Lochmoor Country Club	0.30

Lee County Subtotal = 22.01

Total Potential Reuse Demand =	45.35
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*Denotes users that average less than 100,000 gpd

Table 4
Potential Major Irrigation Water Users

	Potential User	Reuse Demand (MGD)
Collier County		
Collier Co. North/Pelican Bay	Stonebridge	0.48
	Pelican Strand/Reg. Village	0.97
	Island Walk	0.95
	Village Walk	0.37
	Wyndemere	0.58
	Kensington	0.64
	Longshore Lakes	0.27
	Grey Oaks	1.55
	Sterling Oaks	0.16
	Woodlands	0.64
	Parklands	0.83
	Bentley Village	0.16
	Quail Creek, Quail Village	1.37
	Quail West	1.16
	Subtotal	10.13
Collier Co. South		
	Embassy Woods Golf Course	0.25
	Eagle Creek Golf Course	0.48
	Fiddler's Creek Golf Course	1.61
	Royal Wood Golf Course	0.31
	Naples Heritage Golf Course	0.47
	Whispering Pines Golf Course	0.20
	Area Schools	0.24
	Area Parks	0.76
	Sierra Meadows Subdivision	0.04
	Fiddler's Creek Subdivision	1.21
	Collier DRI Subdivision	0.09
	Ironwood Golf Course	0.12
	Subtotal	5.76
Golden Gate	NI	
Marco Island Utilities	NI	
Naples	NI	
Collier County Subtotal =		15.89
Lee County		
Bonita Springs		
	Brooks of Bonita Springs	4.49
	Sweetwater Ranch	0.32

Table 4
Potential Major Irrigation Water Users

	Potential User	Reuse Demand (MGD)
	Fountain Lakes	0.54
	Marsh Landing	0.06
	Woodside Lakes	0.17
	Allendale	0.08
	Eldorado Acres	0.09
	Gulf Atlantic	1.41
	Pelican Landing	3.17
	Bonita Bay	3.48
	Cedar Creek	0.11
	Highland Woods	1.01
	Bonita Fairways	0.91
	Vanderbilt Lakes	0.28
	Woods Edge	0.28
	Spanish Wells	1.39
	Imperial Harbor	0.07
	Bonita Golf Estates	1.12
	Woodbridge Wells	0.09
	Southern Pines	0.30
	Bolt Bonita Excavation	0.34
	Citrus Park	0.27
	Bonita Farms	0.00
	Spruce Run	0.51
	Hunters Ridge	0.95
	Worthington	1.01
	Quail West	0.67
	The Parklands	1.74
	Corkscrew Growers	1.72
	Subtotal	26.58
Cape Coral Everest Pkwy.	NI	
Cape Coral Southwest	NI	
Fiesta Village	NI (see Ft. Myers Beach)	
Forest Utility	NI	
Ft. Myers Beach		
	Not yet named	3.79
	Parker Lakes	0.20
	Port of Iona/Harbor Isles	0.00
	Pottinger's Nursery	0.02
	Lee Co. Property	0.02

Table 4
Potential Major Irrigation Water Users

	Potential User	Reuse Demand (MGD)
	Waterous Corporation	0.02
	Peppertree Pointe	0.10
	Cypress Cove	0.12
	Gulf View Country Club	0.04
	Principia	0.05
	College Point	0.05
	Edison Community College	0.18
	Heath Park	0.30
	Seven Lakes Golf Course	0.28
	Sandpiper Cove	0.67
	Subtotal	5.82
Ft. Myers Central		
	Heritage Palms Golf Course	0.47
	Heritage Palms	0.77
	Eastwood Golf Course	0.56
	Ft. Myers Country Club	0.37
	Centennial Park	0.03
	Omni Development	0.42
	Winkler Road Ext.	0.01
	Ft. Myers Cemetery	0.03
	Little League Ballfield	0.01
	Minor Irrigation Users	0.43
	Red Sox Main Field	0.04
	Jack Parker Corp.	0.35
	Jack Parker Corp. Golf Course	0.47
	Sun City Golf Courses	0.70
	Sun City	1.05
	Colonial Golf & Country Club Golf Course	0.29
	Colonial Golf & Country Club Residential	0.57
	Gateway Development	0.84
	Subtotal	7.41
Ft. Myers South	(No reuse at this time)	
Gateway	NI	
Gulf Three Oaks	NI	
High Point	NI	
Lehigh Acres	NI	
North Ft. Myers	NI	
Pine Island	NI	

Table 4
Potential Major Irrigation Water Users

	Potential User	Reuse Demand (MGD)
Sanibel		
	W. Gulf Dr. Condominiums	0.23
	Middle Gulf Dr. Condominiums	0.25
	Baseball Field	0.02
	Church	0.00
	Sanctuary - Wulfert Point	0.06
	Beachview Estates	0.09
	W. Gulf Dr. Residential	0.13
	Subtotal	0.79
Waterway Estates		
	El Rio Country Club	0.05

Lee County Subtotal = 40.65

Total Potential Reuse Demand =	56.54
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*NI denotes no information

